



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/707,217	11/06/2000	Kimio Nagasaka	9319T-000173	8204

7590

12/08/2004

Harness Dickey & Pierce PLC
PO Box 828
Bloomfield Hills, MI 48303

EXAMINER

EDUN, MOHAMMAD N

ART UNIT	PAPER NUMBER
----------	--------------

2655

DATE MAILED: 12/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/707,217	Applicant(s) NAGASAKA ET AL.	
	Examiner MUHAMMAD N EDUN	Art Unit 2655	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 March 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 8-19 is/are allowed.
- 6) ☒ Claim(s) 1,2,4-6 and 20-32 is/are rejected.
- 7) ☒ Claim(s) 3 and 7 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

Claims 20-32 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 20 and 26 it is not clear as to the structure of the plurality of hologram regions to reproduce images obtained by analysis of a color three-dimensional image into color components. Also it is not clear how the plurality of hologram regions relates or formed with the hologram master. Further the claims are confusing, they do not paint a clear picture as to what is being claimed. Also it seems that analysis of color relates to an intended use of the hologram regions and does not provide additional structural limitations of the hologram master. Clarification is required.

Claims 21-25 and 27-32 are also rejected because they include language or their rejected based claims, and further do not clarify claims.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

Claims 20-26 and 30-32 are rejected under 35 U.S.C. 102(e) as being anticipated by Daiber et al. (6,322,933).

Daiber et al. discloses the invention as claimed. Figs. 1-24b show the hologram master having a plurality of holograms for producing three-dimensional image when irradiate by different color beams (B1, A1, C1, B2, A2, C2) (see Fig. 5A), as set forth in the claims. The reference further teaches: the different wavelength of the beam (inherently relating to red, blue and green colors); the substrate is a disk; the hologram regions are place on circular areas; and the substrate are made of glass; the photosensitive material is formed on the substrate, as set forth in the dependent claims. See the description of the medium and figures for further details relating to the limitations as set forth in the claims.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1, 2 and 4-6 are rejected under 35 U.S.C. § 103 as being unpatentable over Ohno et al. (6,507,557) in view of common knowledge in the art.

Ohno et al. discloses the invention substantially as claimed, however does not specifically teach the optical system being mounted on a linear slider. Figs. 1-11 show the laser patterning device having: the spindle motor (7) connected to the turntable (not shown, but inherent to the apparatus) for mounting the master disk (2) and spinning the

Art Unit: 2655

optical disk while performing the laser pattern (Fig. 1-10 show the different laser patterns); and the optical modulator (3) to vary optical intensity of the laser spot, as set forth in the claims. The reference further teaches the oscillator (14) which inherently includes the synchronization or clock signals to control the timing of the writing information and the optical modulator (3) inherently including the storage device and converter in order to provide the write signal for recording the pattern on the medium. See the description of the apparatus and figures for further details relating the limitations as set forth in the claims.

It is well known in the art to have the optical system (optical head) mounted on a linear slider. Linear slider actuator is well known to provide stable operation of the optical head during recording and accessing of information.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Ohno et al. in view of common knowledge in the art, such that the optical system is mounted on a linear slider, since such a modification would provide stable recording of laser pattern.

Allowable Subject Matter

Claims 8-19 are allowed.

Claims 3 and 7 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter.

The prior art of record alone or in combination does not teach or suggest the laser patterning device of claim 1 having the further limitations as set forth in claims 3 and 7.

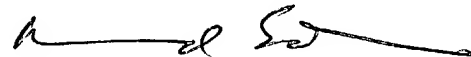
Further the prior art does not teach the laser patterning device and method having the combination of elements and steps with their recited structure, process and arrangement, along with the specific structure, process and arrangement of the sampling sections as set forth in claims 8-19, and also as disclosed in the specification.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MUHAMMAD N EDUN whose telephone number is 703-308-1550. The examiner can normally be reached on FLEXITIME.

Art Unit: 2655

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, DORIS TO can be reached on 703-305-4827. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



MUHAMMAD N EDUN
Primary Examiner
Art Unit 2655